

REMARKS

Priority

The Examiner has indicated that there is a problem with the claim to priority. Applicant has included the claim of priority in the previous amendment which was acknowledged in the Office Action. Applicant is uncertain as to what change is being requested, and respectfully requests that the issue be clarified that Applicant needs to correct.

Claim rejections under 35 U.S.C. § 102

Regarding claims 43, it is asserted that Bisset anticipates the present invention. Applicant respectfully traverses the rejection because the present invention teaches the exact opposite method of scanning as compared to Bisset.

Bisset teaches scanning on less traces than the total number (say one out of every three traces) until an object is detected. Then Bisset teaches activating scanning on all traces (see col. 4, lines 5-29). In summary, Bisset teaches using less than all traces in a low power mode when no object is detected, and then using all of the traces in a higher power mode when an object is detected.

In contrast, the present invention teaches scanning on all traces when operating in a wide scan mode when no presence is being detected on the touchpad. On page 23, lines 18-20, the application states that in a wide scan mode, "all of the electrodes that can be driven are activated so that the presence of a new object can be detected at any location on the touchpad." After an object is detected, less than all traces are then used because only those

traces around the object need to be activated. This is explained on page 24, lines 7-9, when the application states that, "instead of keeping all of the electrodes powered up, only the electrodes in the immediate vicinity of the detected object are kept active" to thereby focus the scanning function. Thus, the present invention goes from using all traces in a wide scan mode, to less than all in a narrow scan mode. Accordingly, because Bisset teaches the exact opposite method, Bisset also teaches away from the method of the present invention.

Regarding claim 44, it is asserted that Bisset teaches deactivating circuitry in areas of the touchpad where the wide scanning mode has determined that the object is not located.

Applicant respectfully traverses this characterization of what Bisset teaches in col. 4, lines 5-18. Bisset is not teaching deactivating circuitry because no object has been detected. The circuitry is simply not yet active because no object has been detected. This low power mode of Bisset, which the Examiner has equated to our wide scanning mode, is in operation until an object is detected. After detection, the high power mode begins where all the traces are active as the object is tracked.

In summary, Bisset only has inactive circuitry when no object is detected. In distinct contrast, the present invention only has inactive circuitry while an object is being detected. Thus, Bisset not only does not anticipate the present invention, it teaches away from the concept when the present invention has determined it is more efficient to have circuitry active and inactive.

Regarding claim 45, it is asserted that Bisset teaches activating circuitry in a localized area for a narrow scanning mode.

Applicant respectfully traverses the rejection because, as explained above, this is in fact the exact opposite of what Bisset teaches in col. 4, lines 5-29. In the low power mode which the Examiner has equated with our wide scanning mode, Bisset uses less than all traces and the present invention teaches using all traces. In the high power mode which the Examiner has equated to our narrow scanning mode, Bisset teaches using all traces and the present invention teaches using only localized traces.

Regarding claim 46, Applicant respectfully traverses the rejection of this claim as Bisset in fact teaches the exact opposite of the present invention as explained above in support of claims 43-45.

Regarding claim 47, Applicant respectfully traverses the rejection as Bisset teaches the opposite of the present invention. Bisset teaches using less than all of the traces when no object is detected, using all traces after an object is detected, and presumably resuming a low power mode and going back to using less than all of the traces when the object is removed. In contrast, the present invention teaches the opposite. The present invention teaches using all the traces when using a wide scan mode and no object is detected, using less than all traces in a narrow scan mode after the object is detected, and then returning to using all traces when the object is removed.

Regarding claim 48, Applicant respectfully traverses the rejection of this claim because Bisset does not address the issue of ignoring another object. In the high power mode, equated to Applicant's narrow scanning mode, Bisset is using all the traces. Applicant has clarified the subject matter being claimed by amending claim 48 to state that other objects are ignored by

not activating traces except in the vicinity of the first detected object. In contrast, Bisset keeps all traces active when an object is detected.

Claim rejections under 35 U.S.C. § 103

Before addressing the specific obviousness rejection, Applicant wishes to clarify what is required to support an obviousness rejection. The Office Action must establish a prima facie case of obviousness to meet the burden of ' 103.

The PTO has the burden under section 103 to establish a prima facie case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.

In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (citations omitted). In establishing a prima facie case of obviousness, the PTO "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." Id. at 1600. Rather, "[t]he test is whether the claimed invention as a whole, in light of all the teachings of the references in their entirety, would have been obvious to one of ordinary skill in the art at the time the invention was made." Connell v. Sears, Roebuck & Co., 220 U.S.P.Q. 193, 199 (Fed. Cir. 1983).

Applicant submits that the Office Action does not make a prima facie case of obviousness in that it does not show either (a) some objective teaching in the prior art that suggests combining the references, or (b) knowledge generally available to one of ordinary skill in the art which would lead that individual to combine the relevant teachings of the references

to achieve the invention claimed, or c) that the combined inventions would result in the claimed invention. See In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

With these requirements in mind, we look at the specific rejections.

Regarding claim 49, it is asserted that Bisset teaches the same scanning modes, and that Alexander teaches a decrease in capacitance between electrodes and a common sense electrode when touched.

Applicant respectfully traverses the rejection of claim 49 for the same reasons given above in support of claims 43-48. Specifically, Bisset fails to teach the scanning modes of the present invention, and in fact does the opposite action in the two scenarios. When no object has been detected, Bisset teaches a low power mode where less than all traces are being used. In contrast, the present invention teaches a wide scanning mode where all the traces are used. After an object is detected, Bisset teaches powering up to a high power mode wherein all the traces are used, and in contrast, the present invention teaches a narrow scanning mode where only those traces around the object are active. Thus, Bisset teaches away from the present invention, and the addition of Alexander does not make the present invention any more obvious.

Regarding claim 50, Applicant respectfully traverses the rejection for the same reasons given above in support of claim 44.

Regarding claim 51, Applicant respectfully traverses the rejection for the same reasons given above in support of claim 48. Applicant has also amended claim 51 in the same manner as claim 48.

Regarding claim 52, Applicant respectfully traverses the rejection for the same reasons given above in support of claim 47.

Regarding claim 53, Applicant respectfully traverses the rejection for the same reasons given above in support of claims 49-52.

Regarding claim 54, Applicant respectfully traverses the rejection of this claim. Bisset does not teach or mention any method of ignoring an object when there is only one object on the touchpad. In this case, the present invention determines that the object is not a pointing object, such as a drop of water. The touchpad circuitry therefore compensates for the presence of the drop of water. This scenario is not described by Bisset.

Regarding claim 55, Applicant respectfully traverses the rejection. If Bisset never mentions the situation of claim 54 when the object to be nullified is detected, then the subject matter of this claim is also not addressed by Bisset. This claim states that if the object, such as drop of water moves, then the touchpad circuitry must change the compensation on the traces to account for this movement.

Regarding claim 56, Applicant respectfully traverses the rejection. Alexander does not remotely describe the subject matter being claimed.

Regarding claim 57, Applicant respectfully traverses the rejection. For the reasons give above in support of claims 43-56, Applicant respectfully points out that Bisset teaches the opposite method of the present invention, and Alexander does not make the invention any more obvious.

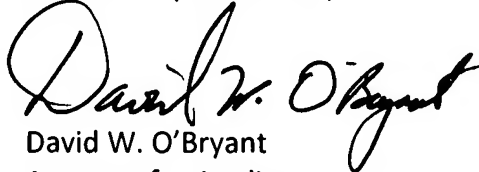
Conclusion

In light of the statements above, Applicant respectfully requests issuance of claims 43-57. If any impediment to the allowance of these claims remains after entry of this Amendment, and such impediment could be alleviated during a telephone interview, the examiner is invited to call David W. O'Bryant at (801) 478-0071 so that such matters may be resolved as expeditiously as possible.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 50-0881.

DATED this 24th day of September, 2007.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David W. O'Bryant", written in a cursive style.

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